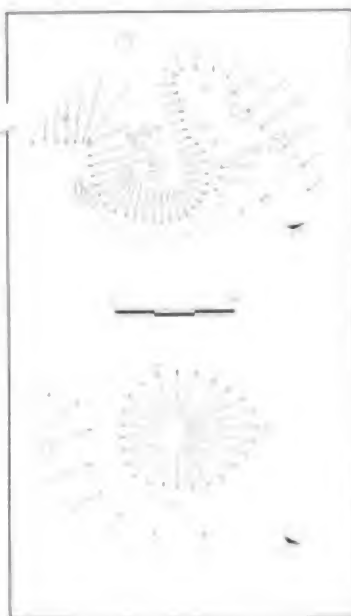




## POTASH PITS AT KIRKLAND

We have been visiting Kirkland since 2000 and in particular have focussed on the last enclosed field before the open fell along the track to Cross Fell and Garrigill. Field surveys have discovered a number of features including low curving banks forming enclosures, possible hut circles, rectangular features, possible field cairns, a stone fast structure which may have been associated with the water supply to the settlement and two circular pits each approximately 4.00-5.00m in diameter and 1.00m deep. The first pit (A) is not in the study field but nearer the village and had been known about for some years but the second (B) which is alongside Kirkland Beck was discovered on our first field survey in 2002. Both were surveyed in detail this year.



Plans of Pit A (top) and Pit B (bottom)

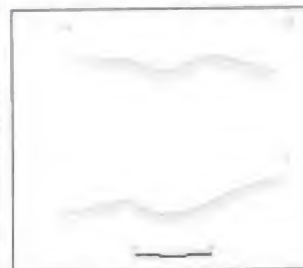
In May we invited Mike Davies-Shiel an well known industrial archaeologist and lecturer to visit the site and give us his opinion on the pits. He immediately confirmed that the pits were 'potash kilns' similar to many that he has identified in the Lake District over the years. Mike has also researched the growth of the wool trade in the county and use of the kilns to produce potash from bracken. The kilns burnt greenish bracken which was grown as a crop and harvested every four years, being cut from Michaelmas Day, the 29<sup>th</sup> September. The ash from the bracken was then mixed with burnt lime to make caustic potash, then tallow and then boiled in soft water to make lyes, a term still used by modern textile manufacturers. In the time of Henry VIII the kilns were called E-lyeing Hearths. The lyes was then used to wash wool before it was dyed. Kendal became the main centre for wool dyeing in the area although it is quite possible it was done locally as well. The process of using pits to burn bracken apparently continued up until the 1850s in the lake District and well into the 20<sup>th</sup> century in the Trossachs in Scotland.

According to Mike, a typical potash pit was built of drystone walling set into the side of a bank and close to a trackway, occasionally it would stand alone in a small enclosure on the lower fellside or just outside the head-dyke where a 'sheep-gate' gave access to the fells. When complete a pit would be about 3m high at the draught hole but level with the ground level at the rear. Pre-Elizabethan kilns were larger while those associated with the monasteries of Furness and Holme Cultram were very large.

Of the two pits at Kirkland, A the description above; it is close the track to Garrigill and so 100m outside what was the fell g until about 1850 when the lo fellside was enclosed to form present fields. The pit has an opening towards the stream facing N which could be the collapse draught hole and is about 2m high at this point. Pit B does not fit easily, it is 900m north of the gate and 180m east of the Garrigill track but there are traces of another track nearby and its position may have been chosen so it was close to the higher areas of bracken. Pit A has no visible draught hole which would be on the stream side NE and is also about 2m high at this point. Both pits are therefore smaller than others described by Mike Davies-Shiel but this may reflect local domestic use rather than a commercial enterprise.

Excavation would confirm whether the pits have a structure whether they were used for potash. We hope to excavate one of them sometime in the future. In the meantime you may like to look at more of them; for example, the author has recently discovered one alongside the track to Melnall Fell.

Harry Haworth  
(illustrations by Martin Rail)



Profiles of Pit A (top) and Pit B (bottom)